

URBAN STRUCTURE IN CONTACT WITH WATER

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The profile of transport, sports and tourist investments located by the Vistula River in Krakow in the years 1990-2012

The chronology of contemporary transport investments and hydrotechnical infrastructure

- 1990 – bridge opened at Kosciuszko Barrage
- 2001 – two new bridges: Kotlarski and Zwierzyniecki opened
- 2002 – Wanda Bridge opened in place of bridges blown up in 1939 and 1945
- 2007-08 – bridge at Kosciuszko Barrage repaired; construction of a footbridge meant for cyclists as well
- 2010 – electric tramline extended over Kotlarski Bridge; Father Bernatek Footbridge opened

Kosciuszko barrage

Kosciuszko Barrage is the middle element of the upper Vistula cascade. Łączany Barrage is located above, whereas Dąbie Barrage – down the river. The hydrotechnical elements of the barrage include: a three-span weir¹, a 190-metre-long and 12-metre-wide lock², a ground dam, a wheelhouse, a fish pass and a little 3-MW hydroelectric power plant.

This engineering construction is important for Krakow – not only for the purposes of flood control. A bridge located in its vicinity supports the city's western ring road in the course of A4-E40 motorway, a significant element of Krakow's transport infrastructure which connects Katowice and Rzeszow with a southward exit towards Zakopane and Chyżne.

A footbridge meant for cyclists as well was built in 2007 during a thorough reconstruction of the bridge (related to rebuilding A4 motorway). Physically and scenically, this footbridge connects the very attractive areas of Bielany with the Monastery of Monk Hermits of Camaldoli as well as Tyniec with Benedictine Abbey. It also acts as an integrating part of Bielańsko-Tyniecki Landscape Park. Water flowing through the barrage makes an important element of the surrounding landscape, too.

A water tram has been plying from the city centre to Tyniec through the lock since 2009.³

Zwierzyniecki Bridge

Zwierzyniecki Bridge is a very important element of Krakow's transport network. Its main assignment is to reduce traffic over Dębnicki Bridge located in the so-called second ring road. One of its advantages is a safe junction making it possible to reach the bridge from Zwierzyniec.⁴ Two lanes run in each direction, whereas pavements and bicycle paths extend on the sides.⁵

1 32-metre-wide span

2 rising height: 3.7 m; water subsidence: 4.4 m

3 http://pl.wikipedia.org/wiki/Stopie%C5%84_Wodny_Ko%C5%9Bciuszko

4 This bridge is 157.92 metres long and 23.70 metres wide. It has one span and consists of three elements: two viaducts and a river bridge with total length of 213 metres. The river bridge with a 132-metre span is fixed in the riverbed without any additional supports. The height of the span varies from 7 m at the bridgeheads to 3.5 m in the middle. In spite of the considerable width of the platform, the bridge has one beam, while its transverse section is 11 m; it has two lanes in each direction; a tramway runs in the middle; pavements and bicycle paths are located on the external edges.

5 <http://www.mostypolskie.pl/most/most-zwierzyniecki-krakow,13,.html>

In 2002, this bridge was awarded in the competition "Bridge of the Year" for introducing new constructional solutions, new equipment and new technologies of implementation. Author: Piotr Wanecki, BBR Poland.⁶

Kotlarski Bridge

This bridge has a special construction as well as a very original form. It is one of few implementations which are not based on classical esthetic models. Built in the course of "Kotlarska Route" in Krakow's Ring Road II, it improved the connection between Podgórze and the city centre as well as reduced traffic in Starowiślna and Na Zjeździe Streets and over Powstańców Śląskich Bridge.⁷

Apart from some improvements in transport, the edifice created a new panorama. Its engineering construction, designed by Witold Gawłowski, has a number of unique features – it is Poland's longest arch bridge without any piers on the river.⁸ "The bearing system is formed by a spatial, freely supported steel structure consisting of four (two internal and two external) "lens" arch girders and an orthotropic platform. The girders consist of upper parabolic arches and lower circular arches at diverse heights."⁹ Author: Studio Archi 5, Witold Gawłowski.

Wanda Bridge

Wanda Bridge is an important investment for Krakow's transport network. It facilitates crossing between the northern and southern parts of the city at the same longitude as Nowa Huta (in Mogiła). The bridge, situated in the sequence of Klasztorna and Półnanki Streets, connects Nowa Huta with Podgórze. Its history dates back to the Middle Ages. In April 2002, some wooden elements, relics of old edifices, were found. The contemporary construction was formed on the basis of a temporary railway bridge. The bridge consists of eight steel spans. Its total length with the bridgeheads is 352.47 m; its width is 15.20 m. A two-lane road as well as some pedestrian and bicycle sequences can be seen on the bridge.¹⁰ Author: Tadeusz Wojciechowski.

Father Bernatek Footbridge

Father Bernatek Footbridge, raised in place of the former Podgórski Bridge according to a design from Prof. Andrzej Getter's Authorial Design and Art Studio, has the form of a steel arch spread between the existing heads of Podgórski Bridge with two suspended platforms (one for pedestrians, the other for cyclists).¹¹ The construction of the footbridge helped to enliven cultural, social and tourist life in the streets which lead here on both sides of the river as well as the adjoining part of Vistula Boulevards. The form of the arch is adjusted to the urban landscape. The significance of the old tract between Wolnica Square and Podgórski Market Square along Mostowa and K. Brodzińskiego Streets was restored.

The footbridge soon became lovers' favourite place. Hundreds of padlocks with engraved names, initials, wishes and dates have been put here. After locking, people throw the key into the Vistula River to show that their feeling will last forever. Those who cross this "bridge" often slow down and smile broadly.

6 http://pl.wikipedia.org/wiki/Most_Zwierzyniecki_w_Krakowie

7 http://pl.wikipedia.org/wiki/Most_Kotlarski_w_Krakowie

8 In the jury's opinion, the adopted architectural and urban concept was characterized by "an original solution with unique features as well as a chance of becoming a symbol of the local community and an attraction in the scale of Krakow."

9 www.komunikacja.krakow.pl

10 http://pl.wikipedia.org/wiki/Most_Wandy_w_Krakowie

11 The steel arch is 145 metres long, whereas the platforms – c. 130 m. The entire construction weighs more than 700 tons, while the cost of building it exceeded PLN38m, including PLN15m from EU funds. http://pl.wikipedia.org/wiki/K%C5%82adka_Ojca_Bernatka

Infrastructure of sports and recreation

Tyniec bicycle route

This nearly twelve-kilometre-long bicycle path extends along the Vistula right bank. The picturesque route runs from Dębicki Bridge through Pychowice and the Whitewater Canoeing Track to end at Benedictine Abbey in Tyniec. The design, prepared while elevating the Vistula levees at the boulevards, was implemented by the Skanska company. It is the most attractive cycling entrance to Krakow from the west. This route is also included in the so-called Amber Trail Vienna-Gdansk and EuroVelo 4 (part of a route leading from Roscoff, Brittany through Paris, Prague, Silesia, Krakow towards Lvov and Odessa).¹² Author: Hydroprojekt Krakow Ltd.

Krakow Beach

Krakow Beach is the effect of a trendy phenomenon of using waterfronts in big European cities. Such a solution seems to work and gets very popular with their inhabitants. Clean water would complete this idyllic climate. The design of developing a fragment of Wołyński Boulevard in Krakow plus a restaurant was prepared within a competition organized in 2008. This complex occupies the area of 542 m², including football and volleyball pitches, a swimming pool and a beach with 150 deckchairs. Small yachts can be moored nearby. The whole is located opposite the monastery in Skałka in an attractive place. The object was opened on June 12, 2010. Krakow Beach is expected to revive the tradition of spending free time by the Vistula. Until the 1970s, the boulevards were the most popular place for holiday leisure in the city. Thus, the entire layout continues the tradition of this place.¹³

The whitewater canoeing track. Kolna sports and recreation centre

This strongly specialized function helped to enrich the diversity of attractions extending along the Vistula River. Even though the investment is meant for a defined group of users, it also makes an open-access attraction for tourists and walkers. This area is well-arranged for the users of individual means of transport. Unfortunately, it lies out of the reach of city transport. In spite of the distance from the centre, the vicinity of two exits from A4 motorway (Krakow's ring road), a water tram stop and Tyniec bicycle path make it an accessible recreation zone. The complex has 47 lodging spaces, a lecture and conference hall as well as gastronomical backup facilities.

The canoeing track satisfies professional sportspeople's requirements. This object is unique in the global scale because – as one of eight centres in the world – it has been ranked as a Continental Centre of Training in Whitewater Canoeing under the patronage of ICF (International Classification of Functioning, Disability and Health). The Polish Canoeing Association uses the track to train the Olympic team. In spite of its professional character, the track is not closed for usual tourists. Such events as pontoon and canoeing trips or water rodeo shows are organized here. Owing to the rough waters in the starting pool, trainings and water polo matches are held, too.¹⁴ Author: Andrzej Getter's Authorial Studio.

12 <http://krakow.naszemiasto.pl/archiwum/925808,trasa-tyniecka,id,t.html>

13 <http://www.plazakrakow.com/>

14 <http://www.hotelbona.compl/index-bona.php?tor-kajakarstwa-gorskiego,47&PHPSESSID=0c9ff0da4fd6c5e2aa262b1543f58af8>

Other Investments in the Vicinity of the Vistula River

Hotels

In recent years, a number of hotels¹⁵, usually characterized by a large limiting outline, 7-9 storeys and a high standard of furnishings, were built in areas which directly neighbour on the Vistula River. To a small extent, they refer to the surroundings, being distinguished by their carefully designed architecture and detail. The Sheraton Hotel¹⁶, built in 2002, is located on the Vistula bank – one of the best locations with a view of Wawel Hill and the river in the vicinity of the Old Town.

Sheraton Krakow is a world-class business hotel with fully furnished conference and banquet background. There are 232 rooms, conference rooms, a ballroom, a restaurant, a fitness centre and a swimming pool in the hotel. An atrium with a glass roof is an important place in its interior. The hotel is managed by the Starwood chain under the Sheraton Hotels & Resorts brand¹⁷.

It has been erected in place of historical stables – before that, the place held a wooden royal brewery. However, there is no material evidence of its existence. As a result of long-lasting use related to its previous purpose and then numerous reconstructions, the building did not display many historical features. The structure of its western part was completely ruined and impossible to retain. During the design works, it was established that the eastern part of the stable should be preserved as its technical condition allowed reconstruction. This part of the old building is exhibited in the interior. In the course of exploration, the front of the historical stables was renovated and exhibited in the southwestern façade of the hotel.

The Qubus Hotel¹⁸, implemented in the years 2008-2010, is located by the Vistula River in a quiet neighbourhood in the district of Podgórze on the right bank in the city centre. It is just a ten-minute walk from the district of Kazimierz and two kilometres from the Main Market Square. It has 194 rooms as well as a swimming pool and baths with hydromassage on the roof.

The Galaxy Hotel is located on the outskirts in place of the former city abattoir whose grounds have been revitalized lately. Its simple body is situated directly at Vistula Boulevard and cut across by an expressway.

The Poleski Hotel and the Kossak Hotel are situated in the vicinity of Wawel in the Vistula bend among the existing buildings and refer to them in various manners. Two implementations: Kazimierz Gallery of entertainment and trade character, and the Tadeusz Kantor Museum under construction, devoted to this outstanding Polish artist, are important for the contemporary riverside landscape in the central zone.

Shopping and culture centres and museums

The Kazimierz Gallery shopping centre¹⁹ was implemented at the first stage of construction on the usable area of 32,780 m² with two storeys, 160 shops, service facilities, a cinema, several restaurants and cafeterias on the ground floor and the

15 Seven big, mainly four- or five-star, hotels were raised in free central areas by the Vistula in the previous decade.

16 The hotel was designed by Prof. Andrzej Kadłuczka's office "ARCHECON" but various publications also mention the names of E. Watelet, J. Wayembergh and G. Kowal. Among the investors, we can enumerate Bank Pekao SA. The general contractors include the NDI SA, NV BESIX and Starwood companies.

17 The company is famous for the implemented Sheraton Warsaw Hotel & Towers and Westin Warsaw Hotel.

18 The principal designer: Prof. Zbigniew Paszkowski

19 The design of the centre was prepared at the architectural office IBM Asymetria in Krakow; the principal designer: Witold Gilewicz

first floor. The overall area of the commercial and service complex is 47,854 m², whereas a car park located within the object is meant for 1,800 passenger cars. Due to the maintenance and renovation of historical buildings grouped around an open square and along an alley leading to the main entrance on the west side of the Gallery, the establishment gained individual character. The square, created in front of the historical buildings as a public space, became a venue for concerts, entertainment events, shows and exhibitions. The north side of the building also faces a public space which once had some ruined industrial buildings. However, many companies have begun reconstructing other areas in the city. This place can be fully modernized and reshaped.

Near Vistula River on the right bank there are three new museums, MOCAM – Museum of Contemporary Art in Krakow, Museum of Schindler Factory – department of historical Museum of Cracow two created in 2005 and Kantor Museum with is building now.

The building of the Tadeusz Kantor Museum and Cricoteka is situated among old buildings in Podgórze directly by the Vistula River.²⁰

This building, quite futuristic in its form, calls Archigram group's visions of future cities to mind. Created in the 1960s with lots of frameworks and gadgets hung above the streets, they resembled space stations. This edifice is expected to change the Vistula waterfront landscape on the side of Old Podgórze. Its large surfaces will be made of architectural concrete. Besides, glass and steel will be applied. As the authors of the Museum and the new Cricoteka emphasize, they would like to use natural, unprocessed materials matching Tadeusz Kantor's creative philosophy.

Projects listed here are a few utilities in the region of the Vistula River in Krakow, almost all objects are service recently erected in the area of the Vistula river. Similarly, as shown here in all areas of sport and recreation and green spaces recently erected on the Vistula. Still in the riverbank area is dominated by modern apartment buildings, for contact, even eye is an important element increasing the attractiveness of the location. From this location, derive maximum benefit developers, not participating during the cleaning or any other. All four cost of maintaining the space in Krakow bear river city government and its president.

20 It was designed by architects Piotr Nawara and Agnieszka Szultk of nsMoonStudio which won a competition for the design of the museum in September 2006. In the early phase of designing, they were supported by arch. Stanisław Deńko

